DOCUMENT RESUME

ED 312 280 TM 014 028

AUTHOR Lord, Frederic M.
TITLE Applications of Item Response Theory to Practical Testing Problems.
REPORT NO ISBN-0-89859-006-X
PUB DATE 80
NOTE 274p.
AVAILABLE FROM Lawrence Erlbaum Associates, Inc., 365 Broadway, Hillsdale, NJ 07642 ($39.95).
PUB TYPE Books (010) -- Guides - Non-Classroom Use (055)

EDRS PRICE Document Not Available from EDRS.
DESCRIPTORS Adaptive Testing; Estimation (Mathematics); Evaluation Problems; *Item Analysis; *Latent Trait Theory; Mastery Tests; Scores; Scoring; Test Construction; *Testing Problems; *Theory Practice Relationship
IDENTIFIERS Classical Test Theory; Information Function (Tests); Item Parameters

ABSTRACT

The purpose of this book is to make it possible for measurement specialists to solve practical testing problems through the use of item response theory (IRT). The topics, organization, and presentation are those used in a 4-week seminar held each summer for the past several years. The material is organized to facilitate understanding; all related materials are not always in the same chapter. Chapter 1 provides a perspective on classical test theory, and Chapter 2 is an introduction to IRT. Chapter 3 discusses the relevance of IRT to conventional item analysis. Chapter 4 presents the information essential for understanding IRT, test scores, and ability estimates as functions of item parameters. Chapter 5 presents information functions basic to most IRT applications. The remaining chapters are generally independent of each other, so that the reader may choose the topics of his/her special interest. Topics include: (1) the relative efficiency of two tests; (2) the optimal number of choices per item; (3) flexilevel tests; (4) two-stage procedures and multilevel tests; (5) tailored testing; (6) mastery testing; (7) estimating ability and item parameters; (8) equating; (9) study of item bias; (10) omitted responses and formula scoring; (11) estimating true-score distributions; and (12) estimating true-score distributions for two tests. (SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****